UNSW Engineering

Bachelor of Engineering (Honours) (Petroleum Engineering)

What do petroleum engineers do?
Petroleum Engineers work with energy companies to design, test and implement efficient methods to extract petroleum or natural gases from the earth and sea floor or store carbon-dioxide or hydrogen in underground formations.

In this career you'll apply chemistry, physics, geology, mathematics, and economics to the discovery, development, production and storage of energy and material resources. The knowledge you acquire in this degree can also be applied to carbon geological sequestration and geothermal resources engineering.

What will your study involve?
This degree will prepare you for a career in the geoenergy industries. This degree has a strong focus on the environment, demonstrating how we can meet global energy needs in a long-term, sustainable manner including the conversion of depleted oil and gas reservoirs into geostorage facilities. You’ll examine various processes used in the geoenergy industry in an efficient, safe and environmentally responsible way. Learn how to apply practical science and engineering principles to identify and solve challenges associated with exploration, extraction, production and storage of energy resources.

UNSW Minerals and Energy Resources Engineering
• We’re amongst UNSW's top ranked subjects - 17th globally for Petroleum Engineering (QS Subject Rankings 2022)
• We have strong relationships with Australia's minerals, oil and gas industry through sponsored scholarships and work experience programs.
• UNSW is at the forefront of petroleum education & research including space resources engineering, low emission technologies, CO2 storage and geothermal energy, with 30 years of research, development, and education experience.
• Study in our controlled mine environment, geomechanics, mineral processing, ventilation, and petrophysics laboratories, VR/AR simulators, drilling simulator, X-ray CT facility, and more.

Program details
Lowest Selection Rank (2022): 90
Duration: Four-year embedded honours degree
Assumed knowledge: HSC level Mathematics Extension 1, Physics

Alternative Entry: UNSW offers the Faculty of Engineering Admission Scheme (FEAS) which is a pathway for students interested in studying undergraduate engineering to support their academic results, find out more at unsw.to/feas

Accreditation
Your Bachelor of Engineering (Honours) degree is recognised globally, is accredited with Engineers Australia, and is also acknowledged by the Washington Accord, which lets you work in over 20 countries across the globe upon graduation.

Career options
You can work in the oil and gas industry, oil service companies, reservoir development, computer-generated modelling, environmental organisations, as well as banking and finance.

Student Testimonials
“I'd love to work in both the office and the field; from offshore to onshore; from conventional to unconventional. It would be great if I can work in Australia, but I will be able to work all around the world without having to re-qualify. Plus the petroleum industry also underpins many other industries.”
Vinh Troung, Petroleum Engineering
### Example study plan

<table>
<thead>
<tr>
<th>YEAR 1</th>
<th>TERM 1</th>
<th>TERM 2</th>
<th>TERM 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>YEAR 1</td>
<td>Introduction to Engineering Design &amp; Innovation</td>
<td>Computing for Engineers</td>
<td>Mathematics 1A</td>
</tr>
</tbody>
</table>

You'll be required to complete 60 days of Industrial Training throughout your degree. This is a sample degree outline only and may be subject to change. Please refer to the UNSW Handbook for further information and relevant course codes.